



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,088	02/27/2004	Masayuki Tamai	NY-KIT-367-US	7537
24972	7590	07/05/2006	EXAMINER	
FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE NEW YORK, NY 10103-3198			CHOI, JACOB Y	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/789,088	Applicant(s) TAMAI ET AL.	
	Examiner Jacob Y. Choi	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,10-12 and 14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 7,10-12 and 14 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.179e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 25, 2006 has been entered.

Specification

2. The amendment filed April 25, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "... *said reflector unit being formed independently of said printed circuit board ... etc*".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2875

4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling "... *said reflector unit being formed independently of said printed circuit board ... etc.*" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The originally filed specification failed to provide any clear support behind the cited limitation(s).

Claim Objections

5. Claims 11-12 are objected to because of the following informalities: dependent claim(s) does not refer to a preceding claim which, in turn, refers to another preceding claim. Claims depend on canceled claim No. 8. See MPEP § 608.01(n). Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

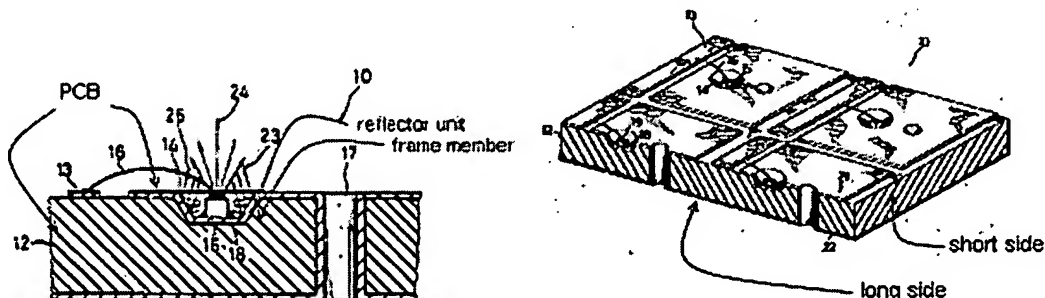
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2875

7. Claims **7 and 10-11** are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (USPN 5,119,174).

Regarding claim **7**, Chen discloses a printed circuit board (PCB; e.g., 21, 22, 12 & 13), a wiring land (e.g., Figure 1) formed on the printed circuit board (e.g., 21, 22, 12 & 13), a light-emitting diode (e.g., 15) element surface-mounted on the printed circuit board (PCB), a bonding wire (e.g., 16) connecting between the LED element and the wiring land (e.g., Figure 2-3), and a reflector unit (e.g., 14) mounted on the printed circuit board (e.g., PCB) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 12; "PCB base"), and a reflector (e.g., 14) connected with an inner side of the frame member (12) and supported to the frame member (e.g., 12), and reflector (e.g., 14) being arranged between the LED (e.g., 15) element and the wiring land (e.g., Figure 1) for directing a beam emitted (e.g., 23-25) from the LED element toward an object to be illuminated (e.g., "display area") wherein the frame member comprises a rectangular frame (e.g., Figure 1) member having long-side portions and short-side portions, wherein the reflector is arranged along the long-side portions and rigidly formed in unison with the frame member, wherein the LED elements are arranged to form an LED array, and wherein the reflector has a reflecting surface extending along the LED array.



Art Unit: 2875

Note: Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

The method of forming the device is not germane to the issue of patentability of the device itself (e.g., "... *said reflector unit being formed independently of said printed circuit board ... etc.*"). *Therefore, this limitation has not been given patentable weight.*

Regarding claim 10, Chen discloses the wiring land is laid at an area between the reflector and the frame member (e.g., Figures 2-3).

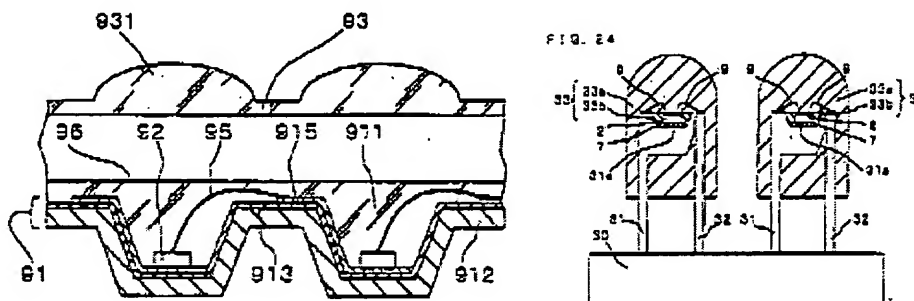
Regarding claim 11, Chen discloses the bonding wire (e.g., 16) is laid to leap over the reflector (e.g., Figures 2-3).

8. Claims **7 and 10-12** are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimoto et al. (USPN 6,874,910).

Regarding claim **7**, Sugimoto et al. discloses a printed circuit board (e.g., 91), a wiring land (e.g., Figure 25) formed on the printed circuit board (e.g., 91), a light-emitting diode (e.g., 92) element surface-mounted on the printed circuit board (e.g., 91), a bonding wire (e.g., 95) connecting between the LED element and the wiring land (Figure 25; e.g., 915), and a reflector unit (e.g., 913; column 3, lines 20-40; "*the insulating layer which may interrupt the effect of heat radiation (light) ... the die bonding paste is commonly a silver particles dispersed resign material ... etc*") mounted on the printed circuit board (e.g., 91) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 912; aluminum) and a reflector (e.g., 913) connected with an inner side of the frame member (e.g., 912) and supported to the frame member (e.g., 912), and reflector (e.g., 913) being arranged between the LED (e.g., 92) element and

Art Unit: 2875

the wiring land (e.g., Figure 25) for directing a beam emitted (e.g., 931) from the LED element toward an object to be illuminated (e.g., "display area") wherein the frame member comprises a rectangular frame member having long-side portions and short-side portions (e.g., Figures 1b, 12b, 13b), wherein the reflector is arranged along the long-side portions and rigidly formed in unison with the frame member, wherein the LED elements are arranged to form an LED array, and wherein the reflector has a reflecting surface extending along the LED array.



Regarding claim 10, Sugimoto discloses the wire land is laid at an area between the reflector and the frame member.

Regarding claim 11, Sugimoto discloses the bonding wire (95) is laid to leap over the reflector (e.g., Figures 24 & 25).

Regarding claim 12, Sugimoto discloses the reflector comprises a relay land (915) on a top face thereof and the bonding wire (95) is laid via the relay land.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2875

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (USPN 5,119,174).

Regarding claim 14, Chen discloses the light source unit suggesting a light emitting diode display with PCB base improving the stability of the wavelength (color) of the LED and decrease the deprecating the light output of the LED to prolong the life of the display.

However, Chen failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (USPN 6,874,910).

Regarding claim 14, Sugimoto discloses the light source unit includes a plurality of the LED arrays for red, blue and green colors.

However, Sugimoto failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Response to Amendment

12. Examiner acknowledges that the applicant has canceled claims 8-9 and 13 and amended claims 7, 1-12 and 14. Currently, claims 7, 10-12 and 14 are pending in the application.

Response to Arguments

13. Applicant's arguments filed April 25, 2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "... *said reflector unit being formed independently of said printed circuit board ... etc*") this limitation has not been given patentable weight because the method of forming the device is not germane to the issue of patentability of the device itself

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "... *This advantageously improves the rigidity of the frame member and enables the reflector unit to be arranged relative to the LED element with accuracy and without a*

Art Unit: 2875

change over time ... etc.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800